



## PATENT ABSTRACTS OF JAPAN

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(21) Application number: **08156747**(22) Date of filing: **18.06.1996**(71) Applicant: **MITSUBISHI HEAVY IND LTD**(72) Inventor: **MANABE RYOJI****(54) REVERSE OSMOSIS APPARATUS FOR FRESHENING SEAWATER****(57) Abstract:**

**PROBLEM TO BE SOLVED:** To provide a reverse osmosis apparatus for freshening seawater which is provided with a reverse osmosis membrane-washing apparatus to efficiently wash the reverse osmosis membrane.

**SOLUTION:** Raw water is supplied to a reverse osmosis membrane module 5 by a high pressure pump 4 from a raw water tank 1 and desalination is carried out. The permeated water which is desalinated by the reverse osmosis membrane module 5 is sent through a permeated water outlet pipe 7 and a concentrated water is discharged through a concentrated water outlet

pipe 6. The permeated water outlet pipe 7 is communicated with an air storage tank 11 through a pulse controllable solenoid valve 10 and air is periodically supplied from the permeated water side of the reverse osmosis membrane at the time of washing the membrane to part turbid substances adhering to the reverse osmosis membrane and washing is carried out efficiently.

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